

WHO FOOD ADDITIVES SERIES: 71-S2

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Prepared by the eightieth meeting of the  
Joint FAO/WHO Expert Committee  
on Food Additives (JECFA)

# Safety evaluation of certain food additives and contaminants

Supplement 2:

## **Pyrrolizidine alkaloids**



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization



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World Health Organization, Geneva, 2020



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## PREFACE

The monograph contained in this volume was prepared following the eightieth meeting of the Joint Food and Agriculture Organization of the United Nations (FAO)/World Health Organization (WHO) Expert Committee on Food Additives (JECFA), which met at FAO headquarters in Rome, Italy, from 16 to 25 June 2015. This monograph summarizes the data on one contaminant group reviewed by the Committee. Monographs on seven food additive groups and another contaminant group discussed at the meeting have been published in WHO Food Additives Series 71 and a separate supplement in WHO Food Additive Series 71, respectively.

The eightieth report of JECFA has been published by WHO as WHO Technical Report No. 995. Reports and other documents resulting from previous meetings of JECFA are listed in [Annex 1](#). The participants in the meeting are listed in [Annex 2](#) of the present publication.

JECFA serves as a scientific advisory body to FAO, WHO, their Member States and the Codex Alimentarius Commission, primarily through the Codex Committee on Food Additives, the Codex Committee on Contaminants in Food and the Codex Committee on Residues of Veterinary Drugs in Foods, regarding the safety of food additives, residues of veterinary drugs, naturally occurring toxicants and contaminants in food. Committees accomplish this task by preparing reports of their meetings and publishing specifications or residue monographs and dietary exposure and toxicological monographs, such as that contained in this volume, on substances that they have considered.

The monograph contained in this volume is based on a working paper that was prepared by JECFA experts. A special acknowledgement is given at the beginning of the monograph to those who prepared this working paper.

Special acknowledgement is due to the Dutch National Institute for Public Health and the Environment (RIVM) for the tremendous contribution in preparing this evaluation following a systematic review approach. Grateful thanks are also extended to Patrick Mulder, Wageningen Food Safety Research, Wageningen University & Research, the Netherlands, for all his work preparing the structural formulae of the chemical compounds mentioned in this monograph, to Coen Graven, Linda Razenberg, Wim Mennes and Jeanine Ridder of the RIVM, and Rob de Vries, Systematic Review Center for Laboratory Animal Experimentation (SYRCLE), Radboud University Medical Centre, the Netherlands, for their contribution to the preparation of this monograph. Editorial assistance was provided by Susan Kaplan.

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Any comments or new information on the biological or toxicological properties of or dietary exposure to the compounds evaluated in this publication should be addressed to: WHO Joint Secretary of the Joint FAO/WHO Expert Committee on Food Additives, Department of Food Safety and Zoonoses, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland.

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